Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

What is claimed is:

1.   (Currently Amended) A computer-implemented method for forming a plurality of stores into a plurality of store clusters based on price optimization, and re-optimizing prices based on the plurality of store clusters, comprising:

collecting store specific information from a plurality of stores;

optimizing prices for a plurality of products for each individual store of the plurality of stores, and wherein the price optimization uses demand coefficients, cost coefficients and optimization rules;

creating a plurality of store clusters from the plurality of stores based on the closeness of the optimized prices of the plurality of products for each individual store, based on store specific information, and based on demand group structure of the plurality of products, and wherein the demand group structure of the plurality of products is based on substitutable products;

re-optimizing prices for the plurality of products for at least one of the plurality of store clusters, wherein the re-optimizing of prices uses demand coefficients, cost coefficients and optimization rules, and wherein the re-optimizing of prices is implemented on a computer; and providing the re-optimized prices to the at least one of the plurality of store clusters; and

wherein the closeness of the optimized prices of the plurality of products is computed using a distance equation:

$$\text{Distance} = \sqrt{\left(\text{Price}_{s1,x} - \text{Price}_{s2,x)}\right)^2 + \left(\text{Price}_{s1,y} - \text{Price}_{s2,y}\right)^2}$$

wherein s1 and s2 are stores in the at least one of the plurality of store clusters, and wherein x and y are two of the optimized prices.

2. (Original) The method, as recited in claim 1, further comprising providing cluster based combinations.

3. (Original) The method, as recited in claim 2, wherein the store specific information is selected from a group comprising point-of-sales data, customer survey data, and cost data.

4. (Previously Presented) The method, as recited in claim 3, wherein the combinations further include assortment and promotion combinations.

5. (Previously Presented) The method, as recited in claim 1, wherein the creating the plurality of clusters, comprises:

providing at least one constraint; and

placing stores that meet the constraints and with the closest optimal combinations in the same cluster of the plurality of store clusters.

6. (Original) The method, as recited in claim 5, wherein the at least one constraint places two stores in the same cluster, by making each store of the two stores have the same optimal combination.

7. (Original) The method, as recited in claim 5, wherein the at least one constraint specifies a maximum number of clusters.

8.   (Currently Amended) ~~An apparatus comprising a program storage media having computer readable code embodied therein, said computer readable code being configured for forming, using a computer, a plurality of stores into a plurality of store clusters, comprising:~~ A computer-readable medium having computer-readable instructions embedded therein, which, when executed by a computer, causing said computer to implement a method for forming a plurality of stores into a plurality of store clusters based on price optimization, and re-optimizing prices based on the plurality of store clusters, comprising:

~~computer code for~~ collecting store specific information from a plurality of stores;

~~computer code for~~ optimizing prices for a plurality of products for each individual store of the plurality of stores, and wherein the price optimization uses demand coefficients, cost coefficients and optimization rules;

~~computer code for~~ creating a plurality of store clusters from the plurality of stores based on the closeness of optimized prices of the plurality of products for each individual store, based on store specific information, and based on demand group structure of the plurality of products, and wherein the demand group structure of the plurality of products is based on substitutable products;

~~computer code for~~ re-optimizing prices for the plurality of products for at least one of the plurality of store clusters, and wherein the re-optimizing of prices uses demand coefficients, cost coefficients and optimization rules; [[and]]

~~computer code for~~ providing the re-optimized prices to the at least one of the plurality of store clusters; and

wherein the closeness of the optimized prices of the plurality of products is computed using a distance equation:

$$\text{Distance} = \sqrt{\left(\text{Price}_{s1,x} - \text{Price}_{s2,x)}\right)^2 + \left(\text{Price}_{s1,y} - \text{Price}_{s2,y}\right)^2}$$

wherein s1 and s2 are stores in the at least one of the plurality of store clusters, and wherein x and y are two of the optimized prices.

9.   (Currently Amended) ~~The apparatus,~~ <u>The computer-readable medium,</u> as recited in claim 8, further comprising ~~computer code~~ <u>computer-readable instructions for causing said computer to</u> ~~for providing~~ <u>provide</u> cluster based combinations.

10.   (Currently Amended) ~~The apparatus,~~ <u>The computer-readable medium,</u> as recited in claim 9, wherein the store specific information is selected from a group comprising point-of-sales data, customer survey data, and cost data.

11.   (Currently Amended) ~~The apparatus,~~ <u>The computer-readable medium,</u> as recited in claim 10, wherein the combinations further include assortment and promotion combinations.

12.   (Currently Amended) ~~The apparatus,~~ <u>The computer-readable medium,</u> as recited in claim 8, wherein ~~the computer code for~~ creating the plurality of clusters, comprises:
        ~~computer code for~~ providing at least one constraint; and
        ~~computer code for~~ placing stores that meet the constraints and with the closest optimal combinations in the same cluster of the plurality of store clusters.

13.   (Currently Amended) ~~The apparatus,~~ <u>The computer-readable medium,</u> as recited in claim 12, wherein the at least one constraint places two stores in the same cluster, by making each store of the two stores have the same optimal combination.

14.   (Currently Amended) ~~The apparatus,~~ <u>The computer-readable medium,</u> as recited in claim 12, wherein the at least one constraint specifies a maximum number of clusters.

Claims 15 – 17 (Cancelled)

18.   (Previously Presented) The method, as recited in claim 1, further comprising providing at least one constraint and wherein the at least one constraint prohibits two stores of the plurality of stores from being in the same cluster.

19.   (Previously Presented) The method, as recited in claim 5, wherein the at least one constraint places two stores in the same cluster, by averaging the prices of an item and placing the average price as the price of the item in each store.

20.   (Previously Presented) The method, as recited in claim 5, wherein the at least one constraint places stores with a geographical closeness in the same cluster.

21.   (Currently Amended) ~~The apparatus,~~ The computer-readable medium, as recited in claim 8, further comprises computer-readable instructions for causing said computer to provide ~~computer code for providing~~ at least one constraint and wherein the at least one constraint prohibits two stores of the plurality of stores from being in the same cluster.

22.   (Currently Amended) ~~The apparatus,~~ The computer-readable medium, as recited in claim 12, wherein the at least one constraint places two stores in the same cluster, by averaging the prices of an item and placing the average price as the price of the item in each store.

23.   (Currently Amended) ~~The apparatus,~~ The computer-readable medium, as recited in claim 12, wherein the at least one constraint places stores with a geographical closeness in the same cluster.

Claims 24 – 25 (Cancelled)